

Not Responsive

[illegible][illegible][illegible]

Attachment A
Activity Hazard Analysis

Project Identification: Guanica Buried Drum Site		Location: Guanica Puerto Rico	US EPA Region II
Phase of Work: Mobilization/Demobilization/Site Restoration	Analysis Performed By: Tricia Sumner	Analysis Approved By: Chris Coleson	
TASK	POTENTIAL HAZARDS	CONTROL MEASURES	
Mobilization/demobilization Site Restoration	Slips/Trips/Falls	Keep working areas free of debris/materials Continuously evaluate area for potential causes of slip/trips/falls Secure equipment and supplies in boat Wear proper sampling boots and PPE that fit and are in good condition Communicate potential hazards to co-workers	
	Strains/Sprains	Use proper lifting techniques Stretching prior to any physical labor Pay attention to the walking/working surface	
	Vehicle/Equipment Accidents	Daily equipment inspection required by operators Equipment use by experienced operators Use spotters when backing up equipment and/or vehicles Use all equipment according to the operators manual Ensure clearances for personnel, overhead lines, and physical obstacles when operating	
	Biological hazards	Be aware of biological hazards in work area Continuously evaluate work areas for biological hazards Avoid contact with animals and insects Avoid contact with poisonous plants Communicate potential hazards to co-workers	
	Overhead Hazards	Ensure clearances for personnel and physical obstacles when operating vehicles Hard-hats shall be worn in areas with identified overhead hazards	
	Fire Protection	Smoking is prohibited inside the exclusion zone. Fire extinguishers will be inspected when brought on-site.	
	Walking/Working Surfaces	Be aware of uneven surfaces and unusual slopes Avoid debris outcrop areas Wear appropriate foot protection	
	Heat Stress	Work rest regiments will be followed. Communicate potential heat stress-related hazards to co-workers Observe co-workers for signs of heat stress.	
EQUIPMENT USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	
Level D	Daily Inspections of PPE	Site-specific training on site hazards	

Attachment A
Activity Hazard Analysis

Project Identification: Guanico Buried Drum Site		Location: Guanico Puerto Rico	US EPA Region II
Phase of Work: Excavation of Target Areas 1 & 2	Analysis Performed By: Chris Coleson	Analysis Approved By: Tricia Sumner	
TASK	POTENTIAL HAZARDS	CONTROL MEASURES	
Excavate to determine the presence of buried drums in Target Areas 1& 2 Remove buried drums Overpack drums as necessary Move overpacks to staging area	Exposure to site contaminants	Level B PPE will be worn when handling unknowns. Minimize potential exposures time through decon techniques Use care in handling drums inspect for leaks and corrosion prior to handling Communicate potential hazards to co-workers Double suits will be worn - tyvek inner/saranex outer	
	Slips/Trips/Falls	Keep working areas free of debris/materials Continuously evaluate area for potential causes of slip/trips/falls Avoid working on uneven terrain Wear proper boots and PPE that fit and are in good condition	
	Excavation of possible buried drums	Excavate slowly to avoid rupturing drums. Spotter should watch closely from signs of drums in excavated soils. Ground crews should be used to hand dig as necessary around containers. Air monitoring should be performed continuously. All containers should be monitoring for possible Radioactive materials. <ul style="list-style-type: none"> Follow Excavation SOP requirements, including: <ul style="list-style-type: none"> (Competent Person) Conduct daily inspections Contact underground utility service locator to define utility locations Inspect excavation area for signs of utilities Protect from cave-in by sloping or benching Protect excavation from water run-in or accumulation Demarcate and protect excavation to prevent entry by vehicles, equipment or personnel Protect personnel from falling loads from equipment Test for and control hazardous atmospheres Maintain minimum 10-foot clearance from all overhead utilities	
	Leaking containers and drums	Inspect drums prior to movement for rust and leaks, bulging containers should be watched rupture Inspect drums to determine contents Look for signs that the drums may be under pressure Overpack drums which are suspect to leaking Have adequate spill control materials available	
	Overhead Hazards	All equipment will maintain safe clearance from energized electrical lines. All personnel will wear hardhats meeting ANSI Z87.	
	Strains/Sprains	Proper lifting techniques Stretching prior to any physical labor Pay attention to the walking/working surface	
	Dangerous weather conditions	Review local weather reports Continuously check weather conditions. Discontinue work if it appears that dangerous weather Communicate any potential dangerous weather conditions to co-workers Identify "safe areas" prior to field activities, if dangerous weather approaches	
	Struck by falling and/or moving objects	Daily Inspection required by operators. Equipment use by experienced operators. Use all equipment according to operator's manual. Ensure clearances for personnel; overhead lines and physical obstacles when operating.	
	Hand Tools	Use all tools and equipment according to manufacturer specifications. Inspection before use. Remove broken or damaged tool's). Tools should be used for the intended purpose. Properly store and handle tools.	
	Fire/Explosion	Smoking is prohibited inside the exclusion zone. A fire extinguisher will be located by work area Fire extinguishers will be inspected when brought on-site.	

Attachment A
Activity Hazard Analysis

		When working in areas where flammable vapors may be present, care must be taken with tools and equipment that may be sources of ignition. O2 and LEL will be monitored as outlined in Section 7.0 of the SSHP.
	Heat Stress	Work rest regiments will be followed. Communicate potential heat stress-related hazards to co-workers Observe co-workers for signs of heat stress.
	Noise	Hearing protection will be worn with a noise reduction rating capable of maintaining personal exposure below 85 dBA (ear muffs or plugs); SHSO will determine the need for hearing protection; all equipment will be equipped with manufacturer's required mufflers.
EQUIPMENT USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
Level B PPE Bobcat & Excavator	Daily Inspections equipment	Site-specific training on site hazards Only qualified operators will be used

Attachment A
Activity Hazard Analysis

Phase of Work: Container Sampling	Analysis Performed By: Tricia Sumner	Analysis Approved By: Chris Coleson	US EPA Region II
TASK	POTENTIAL HAZARDS	CONTROL MEASURES	
Remote opening Sampling of drums	Exposure to site contaminants	Level B PPE shall be worn. Remote opening techniques should be used for drums that are bulging or under pressure Maintain safe distance with ground personnel when opening remotely Communicate potential hazards to co-workers	
	Slips/Trips/Falls	Keep working areas free of debris/materials Continuously evaluate area for potential causes of slip/trips/falls Avoid working on uneven terrain Wear proper sampling boots and PPE that fit and are in good condition	
	Strains/Sprains	Proper lifting techniques Stretching prior to any physical labor Pay attention to the walking/working surface	
	Dangerous weather conditions	Review local weather reports Continuously check weather conditions. Discontinue work if it appears that dangerous weather Communicate any potential dangerous weather conditions to co-workers Identify "safe areas" prior to field activities, if dangerous weather approaches	
	Struck by falling and/or moving objects	Daily Inspection required by operators. Equipment use by experienced operators. Use all equipment according to operator's manual. Ensure clearances for personnel; overhead lines and physical obstacles when operating.	
	Hand Tools	Use all tools and equipment according to manufacturer specifications. Inspection before use. Remove broken or damaged tool's). Tools should be used for the intended purpose. Properly store and handle tools.	
	Fire Protection	Smoking is prohibited inside the exclusion zone. A fire extinguisher will be located by work area Fire extinguishers will be inspected when brought on-site. When working in areas where flammable vapors may be present, care must be taken with tools and equipment that may be sources of ignition.	
	Heat Stress	Work rest regiments will be followed. Communicate potential heat stress-related hazards to co-workers Observe co-workers for signs of heat stress.	
	Noise	Hearing protection will be worn with a noise reduction rating capable of maintaining personal exposure below 85 dBA (ear muffs or plugs); SHSO will determine the need for hearing protection; all equipment will be equipped with manufacturer's required mufflers.	
EQUIPMENT USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	
Level B Excavator	Daily Inspections equipment	Site-specific training on site hazards Only qualified operators will be used	

Attachment A
Activity Hazard Analysis

Project Identification: Guanica Buried Drum Site		Location: Guanica Puerto Rico	US EPA Region II
Phase of Work: Transportation/Disposal	Analysis Performed By: Tricia Sumner	Analysis Approved By: Chris Coleson	
TASK	POTENTIAL HAZARDS	CONTROL MEASURES	
Transporation and Disposal	Exposure to site contaminants	Wear safety glasses, tyvek coveralls, nitrile gloves and overboots Minimize potential exposures time through decon techniques Use care in handling decon supplies and waste streams Communicate potential hazards to co-workers Use care in handling decon supplies and waste streams	
	Slips/Trips/Falls	Communicate potential hazards to co-workers Keep working areas free of debris/materials Continuously evaluate area for potential causes of slip/trips/falls Secure equipment and supplies in boat Wear proper sampling boots and PPE that fit and are in good condition Communicate potential hazards to co-workers	
	Strains/Sprains	Proper lifting techniques Stretching prior to any physical labor Pay attention to the walking/working surface	
	Vehicle/Equipment Accidents	Daily equipment inspection required by operators Equipment use by experienced operators Use all equipment according to the operators manual Ensure clearances for personnel, overhead lines, and physical obstacles when operating. Do not exceed lifting capacity	
	Overhead Hazards	Ensure clearances for personnel and physical obstacles when operating vehicles Hard-hats shall be worn in areas with identified overhead hazards	
	Fire Protection	Smoking is prohibited inside the exclusion zone. A fire extinguisher will be located by the work area Fire extinguishers will be inspected when brought on-site.	
	Dangerous weather conditions	Review local weather reports Continuously check weather conditions. Discontinue work if it appears that dangerous weather Communicate any potential dangerous weather conditions to co-workers Identify "safe areas" prior to field activities, if dangerous weather approaches	
EQUIPMENT USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	
Level D/Modified Level D Box Trucks	Daily Inspections of equipmen	Site-specific training on site hazards	